

**PART NUMBERING GUIDE**

Environmental/Mechanical Specifications on page F5

<b>Package</b> _____		<b>FMX - 635</b>	<b>E</b>	<b>G</b>	<b>20</b>	<b>C</b>	<b>1</b>	<b>- 29.4912MHz</b>	<b>Mode of Operation</b>		
6X3.5X1.0mm max. ht. / Seam Weld (Metal Lid Package)										1=Fundamental	
<b>Tolerance</b> _____										3=Third Overtone	
A=±10ppm										<b>Operating Temperature Range</b> Per Table 1	
B=±15ppm											
C=±20ppm											
D=±30ppm											
E=±50ppm											
<b>Stability</b> _____										<b>Load Capacitance</b> S=Series, XX=XXpF (Pico Farads)	
A=±5ppm / B=±10ppm											
C=±15ppm / D=±20ppm											
E=±30ppm / F=±50ppm											

**ELECTRICAL SPECIFICATIONS**

Revision: 2002-C

<b>Frequency Range</b>	10.000MHz to 80.000MHz
<b>Frequency Tolerance/Stability</b>	A, B, C, D, E, F See above for details. Other Combinations Available. Contact Factory for Custom Specifications.
<b>Operating Temperature Range</b>	A, B, C, D, E, F, G, H (See Table 1)
<b>Aging @ 25°C</b>	±2ppm / year Maximum
<b>Storage Temperature Range</b>	-55°C to 100°C
<b>Load Capacitance</b> "S" Option "XX" Option	Series 10pF to 50pF
<b>Shunt Capacitance</b>	5pF Maximum
<b>Insulation Resistance</b>	500 Megaohms Minimum at 100Vdc
<b>Drive Level</b>	100uW Maximum, 100uW correlation

**TABLE 1: PART NUMBERING CODES**

Operating Temperature		Frequency Stability (±ppm) * Denotes Availability of Options					
Range	Code	±5 ppm	±10 ppm	±15 ppm	±20 ppm	±30 ppm	±50 ppm
		A	B	C	D	E	F
-10 to 60°C	A	*	*	*	*	*	*
-20 to 70°C	B		*	*	*	*	*
0 to 70°C	C		*	*	*	*	*
-10 to 70°C	D		*	*	*	*	*
-20 to 70°C	E		*	*	*	*	*
-30 to 60°C	F				*	*	*
-20 to 80°C	G				*	*	*
-40 to 85°C	H				*	*	*

**EQUIVALENT SERIES RESISTANCE (ESR)**

Frequency Range (MHz)	ESR (ohms) / Mode-Cut	Frequency Range (MHz)	ESR (ohms) / Mode -Cut
<13.000MHz	<50 / 1-AT	13.001-15.000MHz	<45 / 1-AT
15.001-18.000MHz	<35 / 1-AT	18.001-40.000MHz	<25 / 1-AT
24.0001-40.000MHz	<25 / 1-AT	40.0001-80.000MHz	<70 / 3-AT

**MECHANICAL DIMENSIONS**

**Marking Guide**

All Dimensions in mm.		<div>Line 1: Frequency Line 2: CEI YM CEI = Caliber Electronics YM = Date Code (year/month)</div>	
		<div><b>Pad Connection</b> 1 Crystal In 2 Ground 3 Crystal Out 4 Ground</div>	